Merritt Parkway, Metro North Railroad Bridge (Winnipauk Railroad Bridge) Spanning the Metro North Railroad at the 17.55 mile mark on the Merritt Parkway Norwalk Fairfield County Connecticut HAER No. CT-91

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#### PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service U.S. Department of the Interior P.O. Box 37127 Washington, P.C. 20013-7127

# HISTORIC AMERICAN ENGINEERING RECORD

# Merritt Parkway, Metro North Railroad Bridge

(Winnipauk Railroad Bridge)

HAER No. CT-91

Location:

Spanning the Metro North Railroad at the 17.55 mile mark on the Merritt

Parkway in Norwalk, Fairfield County, Connecticut

UTM: 18.631900.4555515

Quad: Norwalk North, Connecticut

Construction Date:

1937

Engineer:

Connecticut Highway Department

Architect:

George L. Dunkelberger, of the Connecticut Highway Department, acted as head

architect for all Merritt Parkway bridges.

Contractor:

Mariani Construction Company

New Haven, Connecticut

Present Owner:

Connecticut Department of Transportation

Wethersfield, Connecticut

Present Use:

Used by traffic on the Merritt Parkway to cross the Metro North Railroad

Significance:

The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge

design and the individuality of each structure, makes them distinctive.

Historians:

Todd Thibodeau, HABS/HAER Historian

Corinne Smith, HAER Engineer

August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

## LOCAL HISTORY

In 1640, Roger Ludlow acquired land along the east side of the Norwalk River from the Long Island Sound to twelve miles inland. A couple of months, later Daniel Patrick, a friend of Ludlow, purchased a similar amount of acreage on the west side of the river. These two acquisitions encompassed all of present-day Norwalk.<sup>1</sup>

Ten years passed between these purchases and settlement of the region. In 1650, Ludlow sold his land to residents of the Hartford Colony. That same year, these new owners moved to what is now East Norwalk, under the leadership of two surveyors, Richard Olmstead and Richard Webb. In 1651, Norwalk formed a town. The community gradually expanded as an agricultural and shipping center. At one point Norwalk included parts of Wilton, New Canaan, and Westport. By the beginning of the American Revolution, Norwalk included the districts of Norwalk, South Norwalk, East Norwalk, West Norwalk, Broad River, Silvermine, Winnipauk, and Cranbury.<sup>2</sup>

In summer 1779, the British burned more than 300 structures in the town. The community took several years to rebound from this loss, but by the early 1800s, Norwalk was again an expanding agricultural and shipping community. Larger scale industrial development commenced in 1848, when the New York, New Haven, and Hartford Railroad reached the Norwalk River. Norwalk became a hatmaking center. The Volk Hat Company employed more than 500 workers. Other substantial enterprises developed, including the Norwalk Lock Company, Norwalk Iron Works, and Roth and Goldschmidt

<sup>1</sup>\_\_\_\_\_, This Is Norwalk (Norwalk: League of Women Voters, 1963), 5.

<sup>&</sup>lt;sup>2</sup>Samuel Richard Weed, <u>Norwalk After Two Hundred and Fifty Years</u> (South Norwalk: C. A. Freeman Publishers, 1901), 18-19.

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Corset Company. Fueling this development was the arrival of large numbers of Irish and German immigrants.<sup>3</sup>

Following World War I, Norwalk experienced another population boom, as many New Yorkers who had vacationed in Norwalk for years settled permanently and began to commute. These new arrivals eagerly awaited completion of the Merritt Parkway. After it was finished, the parkway helped to accelerate the residential development of the western sections of the community, especially Winnipauk and Cranbury. During World War II watchtowers were established on the Merritt to spot airplanes and relay the information to Mitchell Field on Long Island.<sup>4</sup>

## BRIDGE CONSTRUCTION HISTORY

Extending from New York to New Haven, the Metro North Railroad is the primary commuter rail serving Fairfield County. This bridge was built for a branch-line running to the communities of Winnipauk, Wilton, Cannondale, Georgetown, and Ridgefield.

The Daniel Deering Construction Company of Norwalk, CT, received the contract to grade the Merritt Parkway from New Canaan Road/Route 123 to West Rocks Road, in Norwalk (ConnDot project #180-51). While the Metro North Railroad Bridge is within this section of the Merritt, the grade separation and bridge contract went to the Mariani Construction Company of New Haven, CT (ConnDot

<sup>&</sup>lt;sup>3</sup>This Is Norwalk, 5-6.

<sup>&</sup>lt;sup>4</sup>Deborah Wing Ray and Gloria P. Stewart, <u>Norwalk Being an</u>
<u>Historical Account of That Connecticut Town</u>, (Canaan, NH: Phoenix Publishing, 1979), 194, 200.

This Is Norwalk, 6.

<sup>&</sup>quot;3000 Attend Merritt Parkway Opening; Hear Cross Voice Hope For Extension," Norwalk Hour, 30 June 1938, p. 1.

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project #180-63).<sup>5</sup> The bridge cost \$42,774 and was completed in 1937. The paving work for this region of the Merritt extended from Comstock Hill Road, in Norwalk, to West Rocks Road. This contract was awarded to the New Haven Construction Company of New Haven, CT (ConnDot project# 180-95). The Metro North Railroad Bridge has received little maintenance since it was built.<sup>6</sup>

#### BRIDGE DESCRIPTION

The Metro North Bridge is a single-span, reinforced- concrete, barrel-type rigid-frame bridge. The frame spans 37' at a skew of 12° over one railroad track with space left for a future track. The Merritt Parkway travels over the 103' long bridge. The sloping wing walls are oriented 105° to the direction of the parkway.

The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rises 3'-6" from the springline to the crown, while the extrados rises only a few inches from the knee to the crown. The frame thickness at the crown is 18". The frame leg thickness increases from 24" at the base to 42" at the knee. The exposed face of the legs remains vertical, and the hidden face slopes away from the roadway. The legs reach 26'-6" from the footing to the springline and provide almost 21' of clearance for trains.

<sup>&</sup>lt;sup>5</sup>Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

<sup>&</sup>lt;sup>6</sup>Metro North Railroad Bridge, DOT #720; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

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 This Is Norwalk.	Norwalk: League of Women Voters,	1963.

Norwalk Hour. 1937-38.

- -----. Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.
- ----- Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

## **PROJECT INFORMATION**

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.